

- Capability #9 - Feature Status Message requirement, as described by law enforcement, is viewed by Bell Emergis as beyond the capabilities of its solution. However, Bell Emergis can meet the intent of this requirement by alternative means.

As solution providers continue their normal development processes, detailed solution documentation will be produced and made available to law enforcement. These documents will allow the FBI to more thoroughly assess any solution's ability to meet CALEA capability requirements.

Price Estimation Initiative

Bell Emergis granted permission to the FBI to reveal its cost estimates. Based on non-disclosure agreements with the FBI, four other solution providers requested that CALEA pricing information not be included in a publically available document.

The same manufacturer-specific characteristics that cause variations in technical feasibility among switching platforms cause price variations. A better understanding of the technical requirements of CALEA enabled most solution providers to provide the FBI with more refined price estimates. In some cases, however, pricing information obtained by the FBI comes with an accuracy disclaimer of plus or minus 100 percent from the solution providers.⁶ Furthermore, prices charged by solution providers may change depending on reimbursement strategies agreed to by industry and the Government. Those strategies include, but are not limited to, possible per-access line pricing and nationwide buy-out, (whereby the Government funds feature development or purchases the results of the development efforts directly from the vendor. The solution is then made available to all carriers utilizing the specific switch.) The FBI plans to continue its analysis of industry-provided pricing data in the coming months.

Motorola (EMX 2500, EMX 5000)

Motorola has provided the FBI with initial price estimates for a CALEA solution. Based on non-disclosure agreements, Motorola would not permit the FBI to publish CALEA solution pricing information in a publically available document.

Nortel (DMS-100 Family)

Nortel has had the most extensive technical and price discussions with law enforcement, and based on the data provided to the FBI at this time, are furthest along in the development process among switch manufacturers. Nortel believes that recent discussions with law enforcement have resulted in a 25 percent reduction in its previously estimated level of development effort. Nortel has provided the FBI with preliminary solution prices based on a nation-wide buyout of its solution for the DMS-100 family of switches, but would not permit the FBI to disclose pricing information in a publicly available document.

⁶ Lucent Technologies

Lucent (5ESS)

Lucent has provided the FBI with a "first-pass" (initial) price estimate for developing a CALEA solution. Due to its preliminary stage of CALEA solution development, Lucent stated that this price estimate had an accuracy of "plus or minus 100 percent" Based on non-disclosure agreements, Lucent would not permit the FBI to publish specific pricing information in this report. Lucent has notified the FBI that, as development work continues, Lucent will provide a more refined "second-pass" price estimate by February 14, 1998.

Siemens (EWSD)

Siemens has provided the FBI with initial price estimates for a CALEA solution. Based on non-disclosure agreements, Siemens would not permit the FBI to publish CALEA pricing information in a publically available document.

Bell Emergis

Bell Emergis' current price estimate to provide a CALEA network-based solution through-out the United States is approximately \$540 million. However, upon successful completion of field trials and subject to negotiations with the carriers, Bell Emergis believes that a volume-based discount is achievable. Bell Emergis stated in a December 29, 1997 letter that, "subject to a national commitment by the wireline operating companies for deployment and full reimbursement by the Government to the carriers, the current budget estimates of \$500 million is more than sufficient to meet (law enforcement's) needs."

Cooperative Agreement Initiative

The FBI has pursued Agreements in Principle, Memoranda of Understanding and/or Cooperative Agreements that reflect each participants' role in CALEA solution development. Agreements in Principle or Memoranda of Understanding with solution providers for the continued provision of necessary technical and price data is consistent with the industry's normal business process. Further, Cooperative Agreements with carriers for the analysis of proposed technical solutions and testing of those solutions in their networks are considered appropriate by the industry and law enforcement. Upon reaching agreements on CALEA solutions, the FBI anticipates that these agreements will lay the foundation for future cooperative contractual agreements for the deployment of a CALEA-compliant solution.

Motorola (EMX 2500, EMX 5000)

On December 16, 1997 Motorola CIG responded to the FBI's proposed Agreement in Principle. Motorola accepted each of the FBI's proposed clauses and proposed additional terms and conditions particular to CIG's situation. The FBI is evaluating these additional clauses and will use this document as the basis for a final Agreement in Principle.

Nortel (DMS-100 Family)

Nortel is at an advanced stage of solution development. In order to keep pace with technical progress made to date, Nortel has chosen to forego the preliminary Agreement in Principle and focus instead on pursuing contractual agreements with the Government for the actual purchase of its CALEA solution for its DMS-100 family of switches.

Lucent (5ESS)

To date, the FBI and Lucent have been unable to reach consensus on the appropriate agreement vehicle. Based on its experience with other solution providers, upcoming technical and business face-to-face meetings with Lucent are expected to facilitate a resolution of an appropriate agreement vehicle.

Siemens (EWSD)

Although no agreement has yet been signed between the FBI and Siemens, both parties have agreed to continue their technical and business discussions into the first quarter of 1998.

Bell Emergis

Bell Emergis and the FBI have signed a Memorandum of Understanding which outlines the intentions of both parties. Both agree to move forward expeditiously with information sharing, testing and other activities to facilitate the availability of a CALEA-compliant solution before the October 25, 1998 capability compliance date.

GTE

In response to ongoing discussions, the FBI received a signed Cooperative Agreement from GTE on December 23, 1997. This document includes additional conditions not in the original cooperative agreement under which GTE will continue working with the FBI to interpret manufacturer-provided technical and deployment data. The FBI and GTE are working together to resolve remaining points of difference and hope to achieve a final agreement in early 1998.

Other

One major telecommunications carrier has entered into a Letter of Intent to work with Bell Emergis to begin testing of the Bell Emergis solution in its network. The carrier, who requested that its name be withheld from this report, has requested FBI involvement in the testing process to ensure that all CALEA capability requirements are met.

Solution Deployment Timeline Initiative

CALEA solution deployment is dependent on individual solution provider product-development cycles and carrier deployment processes. As a result of technical discussions with

law enforcement, some solution providers have provided estimated dates for solution availability (see Appendix B). Solution deployment is also dependent on carrier purchase decisions, availability of TCCF funds for reimbursement, and individual carrier deployment schedules.

Law enforcement recognizes that for some switches, a CALEA solution may need to be phased in through routine switch software releases and upgrades. The realities of technical solution development and the impact of solution deployment in the network are not lost on law enforcement. Each successive software release will be vital for law enforcement, as solution providers and carriers ensure that all CALEA capability requirements are available as soon as possible. Law enforcement will continue to support the good-faith efforts of solution providers and carriers in developing a CALEA solution.

V. CONCLUSION

The preceding information provides a snapshot of ongoing CALEA implementation efforts since the October 22, 1997 meeting. The likely availability of end-office switch-based and network-based CALEA solutions in the near term is a very positive step toward meeting critical law enforcement and public safety needs. Additionally, the availability of these solutions will directly impact on the Government's need to access TCCF funds in 1998. The recent face-to-face technical discussions between law enforcement and solution providers have diminished many solution providers' concerns regarding CALEA's capability requirements which were previously considered technically difficult to develop. As a result, participating solution providers are now able to assess and develop CALEA's capability requirements in their entirety, without differentiating those capabilities referred to as the punch list. Finally, previous technical feasibility and price estimates have been replaced with more definitive assessments of solution providers' ability to provide a CALEA-compliant solution. As the FBI works with solution providers as they continue their development process, the quality and quantity of this data will improve.

The future of CALEA implementation is directly tied to continued cooperation between industry and law enforcement. For those solution providers and carriers with whom the FBI is currently working, the agreements in the past two months ensure that vital information exchanges will continue, and lay the foundation for follow-on contractual agreements for the delivery of CALEA solutions. For those industry participants who are not yet totally involved, the FBI remains committed to discussions involving a broader base of the carrier and solution provider communities. The technical feasibility, price information, and deployment timelines for the solutions identified in this report can be used as a model for additional switching platforms to move solution providers further along in their normal business process.

APPENDIX A

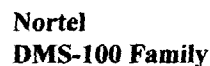
SUMMARY OF LAW ENFORCEMENT MEETINGS WITH INDUSTRY JULY 16, 1997 - DECEMBER 15, 1997

#	Date	Attendees	Purpose/Topics covered
1	7/16	FBI/Bell Emergis	Technical feasibility discussions
2	9/23	FBI/Bell Emergis	Technical feasibility discussions
3	10/7	FBI/GTE/Nortel	Cooperative Agreement/Business meeting
4	10/21	FBI/GTE/Nortel	Technical feasibility discussions
5	11/4	FBI/Bell Emergis	Cooperative Agreement meeting
6	11/10	FBI/Nortel	Technical feasibility action items discussions
7	11/12	FBI/Siemens	Communication of purpose and objectives, limitations of government contracting options and agreement on activity schedules
8	11/13	FBI/Nortel	Pricing methodology meeting
9	11/14	FBI/Motorola	Technical feasibility discussions
10	11/20	FBI/GTE	Discussions of new cooperative agreement process. Review of GTE labor and expense reporting system
11	11/20	FBI/Siemens	Technical feasibility discussions
12	11/20	FBI/Motorola	Technical feasibility discussions
13	11/21	FBI/Siemens	Technical feasibility discussions
14	11/24	FBI/Nortel/GTE	Technical feasibility discussions and capacity issues
15	11/25	FBI/Motorola	Teleconference to continue technical feasibility discussions
16	12/2	FBI/GTE	Teleconference to discuss Cooperative Agreements
17	12/2	FBI/Siemens	Continuation of technical feasibility discussions
18	12/3	FBI/Siemens	Continuation of technical feasibility discussions
19	12/3	FBI/Siemens	Discussion of comparable items for price estimation
20	12/5	FBI/Siemens	Teleconference to discuss technical feasibility

#	Date	Attendees	Purpose/Topics covered
21	12/8	FBI/Bell Emergis	Discussion of price and deployment issues
22	12/9	FBI/Bell Emergis	Technical feasibility discussions
23	12/10	FBI/Motorola	Technical feasibility discussions
24	12/10	FBI/Bell Emergis	Technical feasibility discussions
25	12/11	FBI/Motorola	Technical feasibility discussions and business meeting to discuss price comparables, deployment timelines and process information
26	12/12	FBI/Major carrier [†]	Teleconference to discuss cooperative agreement
27	12/15	FBI/Ameritech	Teleconference to discuss technical feasibility

* At the request of Lucent Technologies, no face-to-face meetings were held between the FBI and Lucent during the time period of this initiative. Information exchanges occurred via facsimile and phone.

[†] At the request of the carrier, its name has been withheld from this report.



Lucent Technologies
5ESS

**Siemens
EWSD**

Motorola
EMX-2500, 5000

Bell Emergis

Note: Actual solution deployment is dependent on carrier purchase and deployment processes

APPENDIX C

BRIEF DESCRIPTION OF PUNCH-LIST CAPABILITIES

Number	Name	Description
1	Content of subject-initiated conference calls	Capability would enable law enforcement access to content of conference calls supported by the subject's service (including the call content of parties on hold).
2	Party Hold, Join, Drop	Messages would be sent to law enforcement that identify the active parties of a call. Specifically, on a conference call, whether a party is on hold, has joined or has been dropped from the conference call.
3	Access to subject-initiated dialing and signaling	Access to all dialing and signaling information available from the subject would inform law enforcement of a subject's use of features. (Examples include the use of flash-hook, and other feature keys).
4	In-band and out-of-band signaling (Notification Message)	A message would be sent to law enforcement when a subject's service sends a tone or other network message to the subject or associate. This can include notification that a line is ringing, or busy.
5	Timing to associate call data to content	Information necessary to correlate call identifying information with the call content of a communications interception.
6	Surveillance Status Message	Message that would provide the verification that an interception is still functioning on the appropriate subject.
7	Continuity check (C-Tone)	Electronic signal that would alert law enforcement if the facility used for delivery of call content interception has failed, or lost continuity.
8	Standardized delivery interface	Would limit the number of potential delivery interfaces law enforcement would need to accommodate from the industry.
9	Feature Status Message	Message would provide affirmative notification of any change in a subject's subscribed-to features.
10	Dialed digit extraction	Information would include those digits dialed by a subject after the initial call setup is completed.
11	Separated delivery	Each party to a communication would be delivered separately to law enforcement, without combining all the voices of an intercepted (conference) call.

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)

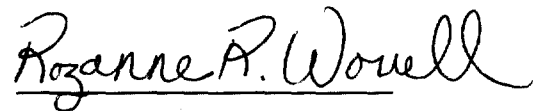
Communications Assistance for)
Law Enforcement Act)

CC Docket No. 97-213

Certificate of Service

I, Rozanne R. Worrell, a Supervisory Special Agent in the office of the Federal Bureau of Investigation (FBI), 14800 Conference Center Drive, Suite 300, Chantilly, Virginia 20151, hereby certify that, on February 11, 1998, I caused to be served, by first-class mail, postage prepaid (or by hand where noted) copies of the **FBI's Reply Comments *In the Matter of Communications Assistance for Law Enforcement Act*, CC Docket No. 97-213 (rel. October 10, 1997)**. The original Reply Comments are filed herewith and copies of these Reply Comments have been sent to the parties identified on the attached service list.

DATED at Chantilly, Virginia this 11th day of February, 1998.



Rozanne R. Worrell

**IN THE MATTER OF
COMMUNICATIONS ASSISTANCE FOR LAW ENFORCEMENT ACT
CC DOCKET NO. 97-213
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